In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended): A <u>machine-readable storage medium comprising a computer program, which, when executed by a computer, causes a device to perform a</u> demand dispatching method for <s>use in an electronic device to manage</s> <u>managing</u> a first fabrication with a production line having a capacity, <s>comprising the steps of</s> <u>the method comprises</u>:

receiving a first demand;

providing a risk database recording risk information for a first demand, wherein

the risk information comprises a first percentage of a low risk part of the

first demand and a second percentage of a high risk part of the first

demand, a first order rate for the row risk part, and a second order rate for

the high risk part, wherein the high risk part is considered as an

overestimated part of the first demand, and the first order rate and the

second order rate are the possibility of the low risk part and the high risk

part to become actual order, respectively;

dividing the first demand into a low risk demand and a high risk demand

according to the first percentage of the low risk part and the second

percentage of the high risk part, wherein the low risk demand is obtained

by multiplying the first demand by the first percentage, and the high risk

demand is obtained by multiplying the first demand by the second

percentage;

determining an expected quantity of the first fabrication; and

managing the capacity of the first fabrication by dispatching portions of the low

risk demand and the high risk demand to the first fabrication according to

the expected quantity, and the first order rate and the second order rate,

thus to allocate the capacity of the first fabrication accordingly, wherein a

first quantity of the low risk demand and a second quantity of the high risk

demand are dispatched to the first fabrication, the first quantity is less

than the amount of the low risk demand, and the second quantity is less

than the amount of the high risk demand, and the amount of the first

quantity multiplied by the first order rate and the second quantity

multiplied by the second order rate is equal to or greater than the

expected quantity.

2. (Currently Amended): The ~~demand dispatching method~~ storage medium as

claimed in claim 1, wherein the step of dispatching the first quantity of the low risk

demand and the second quantity of the high risk demand to the first fabrication utilizes a

dispatching rule as follows:

EQ=FQ*FOR+SQ*SOR,

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first

order rate, SQ is the second quantity, and SOR is the second order rate.

3. (Currently Amended): The ~~demand dispatching method~~ <u>storage medium</u> as claimed in claim 1<u>, wherein the method</u> further ~~comprising~~ <u>comprises</u> dispatching a third quantity of the low risk demand of a second demand dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity<u>, wherein the third quantity of the low risk demand of the second demand dispatched to a second fabrication is not dispatched to the first fabrication and the method steps end if the difference between the expected quantity and the first quantity does not exceed the predetermined ratio of the expected quantity</u>.

4. (Currently Amended): The ~~demand dispatching method~~ <u>storage medium</u> as claimed in claim 3<u>, wherein the method</u> further ~~comprising~~ <u>comprises</u> dispatching a remnant quantity of the high risk demand of the first demand to the second fabrication.

5. (Currently Amended): The ~~demand dispatching method~~ <u>storage medium</u> as claimed in claim 3<u>, wherein the method</u> further ~~comprising~~ <u>comprises</u> the steps of:

monitoring the variation in the first quantity of the low risk demand of the first
fabrication; and

dispatching a pilot order to the first fabrication if the variation in the first quantity
of the low risk demand shows a downward trend<u>,</u>

<u>wherein the method steps end when the variation in the first quantity of the low
risk demand does not show a downward trend</u>.

6-10.   (Cancelled).

11. (Currently Amended): A machine-readable storage medium comprising a computer program, which, when executed by a computer, causes a device to perform a demand dispatching method for use in an electronic device to manage managing an integrated circuit foundry comprising a first fabrication with a production line having a capacity, comprising the steps of the method comprises:

receiving a first demand for a first integrated circuit product;

providing a risk database recording risk information for a first demand, wherein

the risk information comprises a first percentage of a low risk part of the

first demand and a second percentage of a high risk part of the first

demand, a first order rate for the row risk part, and a second order rate for

the high risk part, wherein the high risk part is considered as an

overestimated part of the first demand, and the first order rate and the

second order rate are the possibility of the low risk part and the high risk

part to become actual order, respectively;

dividing the first demand into a low risk demand and a high risk demand

according to the first percentage of the low risk part and the second

percentage of the high risk part, wherein the low risk demand is obtained

by multiplying the first demand by the first percentage, and the high risk

demand is obtained by multiplying the first demand by the second

percentage;

determining an expected quantity of the first fabrication; and

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managing the capacity of the first fabrication by dispatching portions of the low

risk demand and the high risk demand to the first fabrication according to

the expected quantity, and the first order rate and the second order rate,

thus to allocate the capacity of the first fabrication accordingly, wherein a

first quantity of the low risk demand and a second quantity of the high risk

demand are dispatched to the first fabrication, the first quantity is less

than the amount of the low risk demand, and the second quantity is less

than the amount of the high risk demand, and the amount of the first

quantity multiplied by the first order rate and the second quantity

multiplied by the second order rate is equal to or greater than the

expected quantity.

12 .(Currently Amended): The demand dispatching method storage medium as

claimed in claim 11, wherein the step of dispatching the first quantity of the low risk

demand and the second quantity of the high risk demand to the first fabrication utilizes a

dispatching rule as follows:

EQ=FQ*FOR+SQ*SOR,

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first

order rate, SQ is the second quantity, and SOR is the second order rate.

13. (Currently Amended): The demand dispatching method storage medium as

claimed in claim 11, wherein the method further comprising comprises dispatching a

third quantity of the low risk demand of a second demand for a second integrated circuit

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product dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity, wherein the third quantity of the low risk demand of the second demand dispatched to a second fabrication is not dispatched to the first fabrication and the method steps end if the difference between the expected quantity and the first quantity does not exceed the predetermined ratio of the expected quantity.

14. (Currently Amended):   The ~~demand dispatching method~~ storage medium as claimed in claim 13, wherein the method further ~~comprising~~ comprises dispatching a remnant quantity of the high risk demand of the first demand to the second fabrication.

15. (Currently Amended):   The ~~demand dispatching method~~ storage medium as claimed in claim 11, wherein the method further ~~comprising~~ comprises the steps of:

monitoring the variation in the first quantity of the low risk demand of the first fabrication; and

dispatching a pilot order for a third integrated circuit product to the first fabrication if the variation in the first quantity of the low risk demand shows a downward trend,

wherein the method steps end when the variation in the first quantity of the low risk demand does not show a downward trend.

16-20. (Cancelled).

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21. (Currently Amended):   A <u>machine-readable storage medium comprising a</u> <u>computer program, which, when executed by a computer, causes a device to perform a</u> method of <u>integrated circuit product manufacturing</u> ~~dispatching demand for integrated~~ ~~circuit product~~ for use in ~~an electronic device to manage~~ an integrated circuit foundry comprising a first fabrication with a production line having a capacity, ~~comprising the~~ ~~steps of~~ <u>the method comprises</u>:

receiving a first demand for a first integrated circuit product;

providing a risk database recording risk information for a first demand, wherein

the risk information comprises a first percentage of a low risk part of the

first demand and a second percentage of a high risk part of the first

demand, a first order rate for the row risk part, and a second order rate for

the high risk part, wherein the high risk part is considered as an

overestimated part of the first demand, and the first order rate and the

second order rate are the possibility of the low risk part and the high risk

part to become actual order, respectively;

dividing the first demand into a low risk demand and a high risk demand

according to the first percentage of the low risk part and the second

percentage of the high risk part, wherein the low risk demand is obtained

by multiplying the first demand by the first percentage, and the high risk

demand is obtained by multiplying the first demand by the second

percentage;

determining an expected quantity of the first fabrication;

managing the capacity of the first fabrication by dispatching portions of the low

risk demand and the high risk demand to the first fabrication according to

the expected quantity, and the first order rate and the second order rate,

thus to allocate the capacity of the first fabrication accordingly, wherein a

first quantity of the low risk demand and a second quantity of the high risk

demand are dispatched to the first fabrication, the first quantity is less

than the amount of the low risk demand, and the second quantity is less

than the amount of the high risk demand, and the amount of the first

quantity multiplied by the first order rate and the second quantity

multiplied by the second order rate is equal to or greater than the

expected quantity;

receiving a purchase order for the first integrated circuit product; and

manufacturing the first integrated circuit product corresponding to the purchase

order in the first fabrication.

22. (Currently Amended): The ~~method of integrated circuit product manufacturing~~ storage medium as claimed in claim 21, wherein the step of dispatching

the first quantity of the low risk demand and the second quantity of the high risk demand

to the first fabrication utilizes a dispatching rule as follows:

EQ=FQ*FOR+SQ*SOR,

wherein EQ is the expected quantity, FQ is the first quantity, FOR is the first

order rate, SQ is the second quantity, and SOR is the second order rate.

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23. (Currently Amended): The ~~method of integrated circuit product manufacturing~~ storage medium as claimed in claim 21, wherein the method further ~~comprising~~ comprises dispatching a third quantity of the low risk demand of a second demand for a second integrated circuit product dispatched to a second fabrication to the first fabrication if the difference between the expected quantity and the first quantity is exceeding a predetermined ratio of the expected quantity, wherein the third quantity of the low risk demand of the second demand dispatched to a second fabrication is not dispatched to the first fabrication and the method steps end if the difference between the expected quantity and the first quantity does not exceed the predetermined ratio of the expected quantity.

24. (Currently Amended): The ~~method of integrated circuit product manufacturing~~ storage medium as claimed in claim 23, wherein the method further ~~comprising~~ comprises dispatching a remnant quantity of the high risk demand of the first demand to the second fabrication.

25. (Currently Amended): The ~~method of integrated circuit product manufacturing~~ storage medium as claimed in claim 21, wherein the method further ~~comprising~~ comprises the steps of:

monitoring the variation in the first quantity of the low risk demand of the first

fabrication; and

dispatching a pilot order for a third integrated circuit product to the first fabrication

if the variation in the first quantity of the low risk demand shows a

downward trend,

<u>wherein the method steps end when the variation in the first quantity of the low</u>

<u>risk demand does not show a downward trend</u>.

26-30. (Cancelled).

31. (New): A demand dispatch system, comprising:

a storage device storing a risk database recording risk information for a first

demand, wherein the risk information comprises a first percentage of a

low risk part of the first demand and a second percentage of a high risk

part of the first demand, a first order rate for the row risk part, and a

second order rate for the high risk part, wherein the high risk part is

considered as an overestimated part of the first demand, and the first

order rate and the second order rate are the possibility of the low risk part

and the high risk part to become actual order, respectively; and

a processor for executing an allocation planning module, herein the allocation

planning module receives a first demand, divides the first demand into a

low risk demand and a high risk demand according to the first percentage

of the low risk part and the second percentage of the high risk part,

wherein the low risk demand is obtained by multiplying the first demand

by the first percentage, and the high risk demand is obtained by

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multiplying the first demand by the second percentage, determines an

expected quantity of a first fabrication, and manages capacity of the first

fabrication by dispatching portions of the low risk demand and the high

risk demand to the first fabrication according to the expected quantity, and

the first order rate and the second order rate, thus to allocate the capacity

of the first fabrication accordingly, wherein a first quantity of the low risk

demand and a second quantity of the high risk demand are dispatched to

the first fabrication, the first quantity is less than the amount of the low risk

demand, and the second quantity is less than the amount of the high risk

demand, and the amount of the first quantity multiplied by the first order

rate and the second quantity multiplied by the second order rate is equal

to or greater than the expected quantity.

32. (New): A demand dispatch system, comprising:

a storage device storing a risk database recording risk information for a first

demand, wherein the risk information comprises a first percentage of a

low risk part of the first demand and a second percentage of a high risk

part of the first demand, a first order rate for the row risk part, and a

second order rate for the high risk part, wherein the high risk part is

considered as an overestimated part of the first demand, and the first

order rate and the second order rate are the possibility of the low risk part

and the high risk part to become actual order, respectively; and

a processor for executing an allocation planning module, wherein the allocation

planning module receives a first demand for a first integrated circuit

product, divides the first demand into a low risk demand and a high risk

demand according to the first percentage of the low risk part and the

second percentage of the high risk part, wherein the low risk demand is

obtained by multiplying the first demand by the first percentage, and the

high risk demand is obtained by multiplying the first demand by the

second percentage, determines an expected quantity of a first fabrication,

and manages the capacity of the first fabrication by dispatching portions

of the low risk demand and the high risk demand to the first fabrication

according to the expected quantity, and the first order rate and the second

order rate, thus to allocate the capacity of the first fabrication accordingly,

wherein a first quantity of the low risk demand and a second quantity of

the high risk demand are dispatched to the first fabrication, the first

quantity is less than the amount of the low risk demand, and the second

quantity is less than the amount of the high risk demand, and the amount

of the first quantity multiplied by the first order rate and the second

quantity multiplied by the second order rate is equal to or greater than the

expected quantity.

33. (New): An integrated circuit product manufacturing system, comprising:

a storage device storing a risk database recording risk information for a first

demand, wherein the risk information comprises a first percentage of a

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low risk part of the first demand and a second percentage of a high risk part of the first demand, a first order rate for the row risk part, and a second order rate for the high risk part, wherein the high risk part is considered as an overestimated part of the first demand, and the first order rate and the second order rate are the possibility of the low risk part and the high risk part to become actual order, respectively;

a processor for executing an allocation planning module, wherein the allocation planning module receives a first demand for a first integrated circuit product, divides the first demand into a low risk demand and a high risk demand according to the first percentage of the low risk part and the second percentage of the high risk part, wherein the low risk demand is obtained by multiplying the first demand by the first percentage, and the high risk demand is obtained by multiplying the first demand by the second percentage, determines an expected quantity of the first fabrication, manages the capacity of the first fabrication by dispatching portions of the low risk demand and the high risk demand to the first fabrication according to the expected quantity, and the first order rate and the second order rate, thus to allocate the capacity of the first fabrication accordingly, wherein a first quantity of the low risk demand and a second quantity of the high risk demand are dispatched to the first fabrication, the first quantity is less than the amount of the low risk demand, and the second quantity is less than the amount of the high risk demand, and the amount of the first quantity multiplied by the first order rate and the

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second quantity multiplied by the second order rate is equal to or greater

than the expected quantity, and receives a purchase order for the first

integrated circuit product; and

a production line manufacturing the first integrated circuit product corresponding

to the purchase order in the first fabrication.